

the hyphae of the uredinial mycelium as cytological studies have shown, but there is no positive evidence to show that it can be regarded as a distinct species.

Knowing the taxonomic relationship, it may be predicted with reasonable certainty that there is not much danger of the rust transferring to timothy from the other cereals and grasses. It may be expected to become more general in its distribution and may locally do considerable injury; but in spreading it will be limited, chiefly if not entirely, to passing in the summer spore (*uredinial*) stage from timothy to timothy.

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## ABERRANT SOCIETIES OF SANGUINARIA AND TRILLIUM

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Several years ago, in the course of biometric studies on some of our wild flowers, I determined the variation in the number of petals of *Sanguinaria Canadensis* L., the bloodroot, for several localities. One of these localities gave results so aberrant that it seems desirable to place it upon record.

The manuals give the number of petals as 8-12 but always figure it with 8 petals. Dr. Cheney, formerly of the University of Wisconsin, informs me that the modal number is eight in every one of the localities in which he has seen it in that state. The following table gives my results, with a count from Milwaukee, Wisconsin, for which I am indebted to Dr. P. H. Dernehl.

Place	Year	No.	6	7	8	9	10	11	12
Yonkers, N. Y.....	'99	102	0	0	18	18	16	25	24
Alpine, N. J.....	'99	171	3	2	165	1	0	0	0
Glencoe, Ill.....	'00	75	0	2	73	0	0	0	0
Milwaukee, Wis.....	'02	103	0	1	98	2	2	1	0
Stony Brook, Mass.....	'99	4	0	0	4	0	0	0	0
Blue Island, Ill.....	'00	8	0	0	8	0	0	0	0
Eagle Heights, Wis.....	'02	5	0	0	5	0	0	0	0

It is evident that in general any other number than 8 petals is a rarity. The society in Yonkers where the count was made is, therefore, a remarkably aberrant one, presenting a polygon of

frequency of a peculiar character. The locality was a wooded slope in the area bounded by Midland, Yonkers, Jerome, and McLean Avenues. I have sent this note to TORREYA in the hope that some of the local botanists may care to make counts of this species in other surrounding *Sanguinaria* localities and investigate the nature of this peculiar society.

I am reminded, in this connection, of a similar aberrant society of *Trillium grandiflorum* Salisb. near Williamsville, Erie Co., N. Y. This grove contains an unusually large number of cases of acaulescence, petiolate leaves, and sepalody of the petals. These variations are all known in *Trillium grandiflorum*, but they are really common in this particular society.

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## REVIEWS

### Thaxter's Contribution toward a Monograph of the Laboulbeniaceae. Part II\*

Part II of Professor Thaxter's monograph of the Laboulbeniaceae is a handsome work of 251 quarto pages and 44 plates and is throughout, as it is almost superfluous to remark, of the same high quality that characterized the first part of the monograph, published about twelve years ago. The growth of our knowledge of these small fungous parasites on insects and the manner in which Professor Thaxter has made this special field peculiarly his own is well illustrated by the fact that when he began his studies of the Laboulbeniaceae eighteen or twenty years ago the group in the world as a whole was credited with six described genera (four of them valid) represented by fifteen described species, of which only one was from North America. The present contribution brings the number of described species and varieties up to about five hundred, distributed in more than fifty genera, and the author intimates that during the progress of the work more than one hundred additional new species have accumulated, which must await elaboration at some future time. And this expansion is due in very slight measure to any change

\* Thaxter, R. Contribution toward a Monograph of the Laboulbeniaceae. Part II. *Memoirs of the American Academy of Arts and Sciences* 13: 219-469. *pl.* 28-71. Je 1908.